Application No.10/549.420 Attorney Docket: 2017-25

Claim Amendment under 37 C.F.R. §1.121

Claims 1-2. (canceled)

Claim 3. (currently amended) An actuator having the function of control of operation displacement, which comprises of a cylinder 100 in which a working flow is supplied, one or more piston 160 reciprocally movable in the cylinder 100 to divide the inner space of cylinder 100 into the first space 101 and the second space 102, a shaft rotating axis 140 rotatably mounted through the wall of the cylinder 100, a power transmission unit 120, 130 connected between the piston 160 and the shaft rotating axis-140 to transfer the reciprocating force of piston 160 to the shaft rotating axis 140 and the flow pathways 11. 12 connecting the first and the second space 101, 102 to the exterior solenoid valve 20, and the shaft rotating axis 140 could be rotated according to the action of solenoid valve 20, characterized in that the actuator further comprises of a magnet 231 provided on one side of the piston 160, a guide 211 provided on one side of the cylinder horizontally 100 vertically to reciprocal direction of the piston 160, a slider 213 being guided by the guide 211 and moving horizontally vertically to the reciprocal direction of the piston 160, a sliding plate 241 provided outside of the cylinder 100 and being movable along the reciprocating piston 160 and having an inclined slot 243 by which the slider guide 211 is engaged, a magnetic sensor 235 provided on one side of the sliding plate 241 and being adjacent to the wall of the cylinder 100, the magnetic sensor 235 being capable of sending a signal to the solenoid valve 20 if the magnet 231 is sensed, and an action range setting means 219, 221 having the scale representing displacement of the magnetic sensor 235, and the sliding plate 241 is slid along the reciprocal direction of the piston 160 as the slider 213 moves vertically.

Claim 4. (currently amended) An actuator of claim 3 <u>wherein</u> a slide hole 211a is formed in the longitudinal direction on the center of the guide 211, and a reciprocating rod 217 is inserted on the slide hole 211a to move the piston 160 reciprocally.